

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) ~~A method of providing operating system drivers during an operating system installation on a computer system, the method comprising:~~

~~storing the operating system drivers for at least two different types of operating systems on a read only memory (ROM) within the computer system; and~~

~~copying at least one of the operating system drivers from a virtual disk drive of the computer system during the operating system installation.~~

2. (Currently amended) A method of providing operating system drivers during an operating system installation on a computer system, the method comprising:

storing the operating system drivers on a read only memory (ROM) within the computer system;

copying at least one of the operating system drivers from a virtual disk drive of the computer system during the operating system installation by:

~~The method of providing operating system drivers as defined in claim 1 wherein copying at least one of the operating system drivers from a virtual disk drive further comprises:~~

~~Invoking basic input output system (BIOS) routines; and
showing the operating system drivers residing on the ROM
as files stored on the virtual disk drive by the BIOS
routines.~~

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

3. (Currently amended) The method of providing operating system drivers as defined in claim 2 further comprising:

requesting disk services to the virtual disk drive by:[]]

invoking interrupt 13h BIOS routines directed to the virtual disk drive; and

returning a file name for at least one of the operating system drivers by the interrupt 13h BIOS routines as if the operating system drivers resided on the virtual disk drive.

4. (Original) The method of providing operating system drivers as defined in claim 1 wherein storing the operating system drivers on the ROM within the computer system further comprises storing the operating system drivers on the ROM along with a basic input output system (BIOS).

5. (Currently amended) ~~The method of providing operating system drivers as~~ defined in claim 1 wherein storing operating system drivers on the ROM within the computer further comprises:

storing on the ROM a first set of operating system drivers operable with a first operating system; and

storing on the ROM a second set of operating system drivers operable with a second operating system.

6. (Currently amended) ~~The method of providing operating system drivers as~~ defined in claim 5 further comprising having only operating system drivers operable with the operating system to be installed available for copying from the virtual disk drive.

7. (Currently amended) A method of providing operating system drivers during an operating system installation on a computer system, the method comprising:

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

storing the operating system drivers on a read only memory (ROM) within the computer system by:

storing on the ROM a first set of operating system drivers operable with a first operating system; and

storing on the ROM a second set of operating system drivers operable with a second operating system;

copying at least one of the operating system drivers from a virtual disk drive of the computer system during the operating system installation; and

~~The method of providing operating system drivers as defined in claim 6 wherein having only the operating system drivers operable with the operating system to be installed available for copying from the virtual disk drive further comprises~~

having only operating system drivers operable with the operating system to be installed available for copying from the virtual disk drive by showing only the operating system drivers operable with the operating system to be installed as files stored on the virtual disk drive by the BIOS routines.

8. (Currently amended) The method of providing operating system drivers as defined in claim 7 wherein showing the operating system drivers as files stored on the virtual disk drive further comprises:

requesting disk services to a disk drive name that does not physically reside in the computer system by:[[:]]

invoking interrupt 13h BIOS routines directed to the disk drive name that does not physically reside in the computer system;

returning a file name for operable operating system drivers by the Interrupt 13h BIOS services as if the operating system drivers resided on the disk drive name that does not physically reside in the computer system.

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004 .

9. (Currently amended) A computer system comprising:
a CPU;
a main memory array coupled to the CPU;
~~— a first bus bridge coupling the CPU and main memory array;~~
~~— a primary expansion bus;~~
~~a secondary an expansion bus coupled to the CPU; and~~
~~— a second bus bridge coupling the primary and secondary expansion bus;~~
a read only memory (ROM) array coupled to the ~~secondary~~ expansion
bus, wherein the ROM array stores operating system drivers; and
wherein the computer system ~~is adapted to make~~ makes the operating
system drivers appear to reside on a virtual floppy drive for copying
during ~~loading~~ installation of an operating system for the computer
system, and wherein the computer system loads the operating
system drivers during booting of the operating from locations other
than the ROM.

10. (Original) The computer system as defined in claim 9 wherein the ROM
array also stores basic input output system (BIOS) firmware.

11. (Currently amended) The computer system as defined in claim 10 wherein
the BIOS firmware, when invoked for disk services, ~~is adapted to make~~ makes
the operating system drivers appear to reside on the virtual floppy drive.

12. (Currently amended) The computer system as defined in claim 9 further
comprising:

said ROM array stores a first set of operating system drivers for a first
operating system;

said ROM array stores a second set of operating system drivers for a
second operating system; and

wherein the computer system ~~is adapted to make~~ makes only one of the
first and second set of operating system drivers available for

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

copying from the virtual floppy drive during ~~loading~~installation of the
operating system for the computer system.

13. (Currently amended) A method ~~of loading an operating system on a~~
~~computer, the method comprising:~~

storing operating system drivers on a read only memory (ROM);
informing a basic input output system (BIOS) of an operating system type
to be installed;
making available during the ~~loading~~installation of the operating system the
operating system drivers stored on the ROM appropriate for the
operating system type to be installed;
~~loading~~installing the operating system; and
copying at the appropriate time during the ~~loading~~installation of the
operating system at least one of the operating system drivers from
a virtual floppy drive; and then
booting the installed operating system.

14. (Currently amended) The method ~~of loading an operating system on a~~
~~computer as defined in claim 13 wherein storing operating system drivers on the~~
ROM further comprises:

storing a first set of operating system drivers operable with a first operating
system; and
storing a second set of operating system drivers operable with a second
operating system.

15. (Currently amended) The method ~~of loading an operating system on a~~
~~computer as defined in claim 14~~ wherein informing the BIOS of the operating
system type to be installed further comprises:

selecting the operating system type to be installed on a BIOS setup
screen; and

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

setting an environment variable in a non-volatile random access memory (RAM) based on the selecting step that indicates the operating system type to be installed.

16. (Original) The method ~~of leading an operating system on a computer as~~ defined in claim 15 wherein making available the operating system drivers stored on the ROM further comprises:

using BIOS programs to access the operating system drivers stored on the ROM;

referring, by the BIOS programs, to the environment variable in non-volatile RAM; and

making one of the first and second set of operating system drivers available on the virtual floppy drive by the BIOS program based on a state of the environment variable in non-volatile RAM.

17. (Currently amended) A read only memory (ROM) device comprising:
a basic input output system (BIOS) program;
a set of hardware drivers; and

wherein the BIOS program ~~is adapted to~~, when executed by a microprocessor, ~~make~~ makes the set of hardware drivers available for copying during installation of an operating system by ~~providing~~ showing the hardware drivers on the ROM as files on a virtual disk drive.

18. (Currently amended) The ROM device as defined in claim 17 wherein the set of hardware drivers further comprises:

a first set of hardware drivers for use with a first type operating system;

a second set of hardware drivers for use with a second type operating system; and

wherein the BIOS program ~~is adapted to make~~ makes only the first set of hardware drivers available during installation of the first type

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

operating system, and wherein the BIOS program is ~~adapted to~~
~~make~~ makes only the second set of hardware drivers available
during installation of the second type operating system.

19. (Original) A method of providing operating system drivers during an operating system installation on a computer system, the method comprising:

storing a first set of operating system drivers operable with a first operating system in a read only memory (ROM) of the computer system;
storing a second set of operating system drivers operable with a second operating system in the ROM; and
copying at least one of the operating system drivers from a virtual disk drive of the computer system during the operating system installation.

20. (Original) The method of providing operating system drivers as defined in claim 19 further comprising:

selecting on a basic input output system (BIOS) setup screen one of the first and second sets of operating systems, a selected system, to be installed on the computer system; and
having only operating system drivers operable with selected system, selected drivers, available for copying from the virtual drive.

21. (Currently amended) The method of providing operating system drivers as defined in claim 20 further comprising:

requesting disk services to a disk drive name that does not physically reside in the computer system by::[]
invoking interrupt 13h BIOS services directed to the disk drive name that does not physically reside in the computer system; and
returning file names for the selected drivers by the interrupt 13h BIOS services as if the selected drivers resided on the disk drive name that does not physically reside in the computer system.

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

22. (Cancelled).
23. (Currently amended) A computer system comprising:
a CPU;
a main memory array coupled to the CPU;
an expansion bus coupled to the CPU; and
a read only memory (ROM) coupled to the expansion bus, wherein the
ROM stores basic input output system (BIOS) programs;
~~The computer system as defined in claim 22~~
wherein the BIOS programs of the ROM are further adapted to show the
show a virtual floppy drive whose contents reside in the random
access memory (RAM) area of the virtual address space.
24. (Currently amended) A computer system comprising:
a CPU;
a main memory array coupled to the CPU;
an expansion bus coupled to the CPU; and
a read only memory (ROM) coupled to the expansion bus, wherein the
ROM stores basic input output system (BIOS) programs;
~~The computer system as defined in claim 22~~
wherein the BIOS programs of the ROM are further adapted to show the
show a virtual floppy drive whose contents reside in the ROM area
of the virtual address space.
25. (Currently amended) The computer system as defined in claim 24 further
comprising:
said ROM contains operating system drivers necessary to interface an
operating system of the computer system with hardware of the
computer system; and
wherein the BIOS programs are adapted to show the operating system
drivers on the ROM as the contents of the virtual floppy drive.

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

26. (Currently amended) The computer system as defined in claim 25 further comprising:

said ROM contains a first set of operating system drivers for use with a first operating system;

said ROM also contains a second set of operating system drivers for use with a second operating system; and

wherein the BIOS programs ~~are adapted to show~~ as contents of the virtual floppy drive the first set of operating system drivers if the first operating system is to be installed on the computer system, and wherein the BIOS programs are further adapted to show as contents of the virtual floppy drive the second set of operating system drivers if the second operating system is to be installed on the computer system.

27. (Original) A method of providing operating system drivers during an operating system installation on a computer system, the method comprising:

storing a first floppy image having a first set of operating system drivers operable with a first operating system, the first floppy image stored in a read only memory (ROM) of the computer system;

storing a second floppy image having a second set of operating system drivers operable with a second operating system, the second floppy image stored in the ROM; and

providing one of the first and second floppy images as a virtual floppy drive during the operating system installation.

28. (Original) The method of providing operating system drivers as defined in claim 27 further comprising:

selecting on a basic input output system (BIOS) setup screen one of the first and second sets of operating systems, a selected system, to be installed on the computer system; and

Appl. No. 09/965,998
Amdt. dated August 27, 2004
Reply to Office action of July 1, 2004

having only the floppy image having operating system drivers operable with selected system, a selected floppy image, available on the virtual floppy drive.

29. (Currently amended) The method of providing operating system drivers as defined in claim 28 wherein providing one of the first and second floppy images as a virtual floppy drive during the operating system installation further comprising:

- requesting disk services to a disk drive name that does not physically reside in the computer system by:[[:]]
- invoking interrupt 13h BIOS services directed to the disk drive name that does not physically reside in the computer system; and
- returning file names in the selected floppy image by the interrupt 13h BIOS services as if the selected floppy image resided on the disk drive name that does not physically reside in the computer system.